

Appl. No. 10/024,967

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims

1. (currently amended) A method for measuring adhesion of a polymer emulsion binder to a heated surface which comprises:

securing a metal plate to a heated platform, said heated platform being at a temperature of at least 350 °F (177 °C);

allowing the metal plate to equilibrate to the temperature of the heated platform;

applying a polymer emulsion binder to a substrate, wherein the substrate is used in a creping process, to form a coated substrate having a coated side and an uncoated side;

attaching an end of the coated substrate to a tensile measuring device;

pressing the coated side of the coated substrate onto the heated metal plate;

waiting a period of time to allow drying and/or partial curing of the binder;

separating the metal plate from the tensile measuring device at a uniform speed, said substrate attached to said tensile measuring device; and

recording the force required to remove the substrate from the metal plate.

2. (new) The method of claim 1 wherein the substrate is a paper or a cotton fabric.

3. (new) The method of claim 1 wherein the force required to remove the substrate from the metal plate is compared to the force required to remove a substrate coated with a control binder, the control binder being useful in a creping process.

4. (new) The method of claim 3 wherein the control binder is a vinyl acetate-ethylene polymer emulsion.

5. (new) The method of claim 3 wherein the force required to remove the coated substrate is 35 to 200 % of the substrate coated with the control binder.

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6. (new) In a method for predicting the effectiveness of a binder in a creping process, wherein the peel strength of the polymer emulsion binder on a heated metal surface is measured, the improvement which comprises:

securing a metal plate to a heated platform, said heated platform being at a temperature of at least 350 °F (177 °C);

allowing the metal plate to equilibrate to the temperature of the heated platform;

applying a polymer emulsion binder to a substrate, wherein the substrate is used in a creping process, to form a coated substrate having a coated side and an uncoated side;

attaching an end of the coated substrate to a tensile measuring device;

pressing the coated side of the coated substrate onto the heated metal plate;

waiting a period of time to allow drying or partial curing of the binder;

separating the metal plate from the tensile measuring device at a uniform speed, said substrate attached to said tensile measuring device;

recording the force required to remove the substrate from the metal plate; and

comparing the force required to remove the substrate from the metal plate to a force required to remove a substrate coated with a control binder using said method, the control binder being useful in a creping process.

7. (new) The method of claim 6 wherein the substrate is a paper or a cotton fabric.

8. (new) The method of claim 7 wherein the control binder is a vinyl acetate-ethylene polymer emulsion.

9. (new) The method of claim 7 wherein the force required to remove the coated substrate is 35 to 200 % of the force required to remove the substrate coated with the control binder.